

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,524	07/22/2003	Hideo Sato	240585US6	5818
	590 01/22/2007 AK, MCCLELLAND, MA	EXAMINER		
1940 DUKE STREET ALEXANDRIA, VA 22314			STREGE, JOHN B	
			ART UNIT	PAPER NUMBER
			2624	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	THS	01/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/623,524	SATO, HIDEO				
Office Action Summary	Examiner	Art Unit				
	John B. Strege	2624				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period to Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from . cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 22 Ju	ulv 2003.					
·— · _— —	action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims		·				
4) Claim(s) <u>1-9</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9</u> is/are rejected.						
	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	ध.	·				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:  1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	(PTO-413)					
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO/SB/08)		Paper No(s)/Mail Date  5) Notice of Informal Patent Application				
Paper No(s)/Mail Date 6) Other:						

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, and 5-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Itsumi et al. (hereinafter "Itsumi").

Itsumi discloses a personal authentication system (col. 1 lines 5-15) comprising: a first electrode that is disposed in a first skin area of a person to be authenticated (see numeral 142 of figure 2B); a second electrode that is disposed in a second skin area apart from the first skin area (see numeral 142 of figure 2B representing multiple electrodes), the contact surface between the second electrode and the second skin area having a predetermined area such that the resistance of the epidermis in the second skin area becomes substantially zero when an electric potential is generated between the first electrode and the second electrode (see figure 4, voltage is equal to the current (which is constant) multiplied by the resistance, thus the graph shown is proportional to the resistance graph by position, furthermore see col. 3 lines 15-25, and col. 6 lines 9-59); a measuring unit for measuring the resistance distribution of the epidermis in the first skin area based on a predetermined voltage that is applied between the first electrode and the second electrode and a current flowing between the first electrode and the second electrode through the body, including the skin, of the

Application/Control Number: 10/623,524

Art Unit: 2624

person to be authenticated (col. 3 lines 15-30); and an authentication unit that stores the resistance distribution data, which is measured in advance, of the epidermis in the first skin area of a validated person, for comparing the resistance distribution data of the epidermis in the first skin area of the person to be authenticated, the resistance distribution being measured with the measuring unit, with at least part of the stored resistance distribution data of the epidermis of the validated person to validate the

Regarding claim 2, as seen in figure 4 there are areas of the finger where the resistance doesn't substantially vary.

Regarding claim 3, the distance between the first electrode and the second electrode is longer than a distance in a case in which electrical leakage begins to occur between the first electrode and the second electrode through skin upon generation of an electric potential between the first electrode and the second electrode (col. 6 lines 9-59).

Regarding claim 5, the electrodes 142 seen in figure 2B are two-dimensional.

Regarding claim 6, the electrodes 142 seen in figure 2B are plane electrodes.

Claim 7 is similarly analyzed to claim 1.

person to be authenticated (col. 3 lines 15-30).

Claim 8 is similarly analyzed to claim 1.

Regarding claim 9, the electrodes 142 seen in figure 2B are plane electrodes.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Application/Control Number: 10/623,524

Art Unit: 2624

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Itsumi".

As discussed above Itsumi discloses all of the limitation of claim 1 and measures the resistance distribution of the epidermis to identify the positions in the finger of the person to be authenticated based on the resistance distribution near the joints of the finger (see figure 2B and col. 6 lines 9-59). Itsumi does not explicitly disclose using a plurality of fingers, however it is well known to use multiple fingers in order to increase the security of a system thus the examiner declares official notice. At the time of the invention it would have been obvious to one of ordinary skill in the art to use multiple fingers with the motivation being to enhance the security of the system.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,559,504 Surface shape sensor, identification device using this sensor, and protected system using this device.

USPN 5,995,643 Image input system based on finger collation.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Strege whose telephone number is (571) 272-7457. The examiner can normally be reached on Monday-Friday between the hours of 8-5.

Page 5

Application/Control Number: 10/623,524

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

BHAVESH M MEHTA SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600